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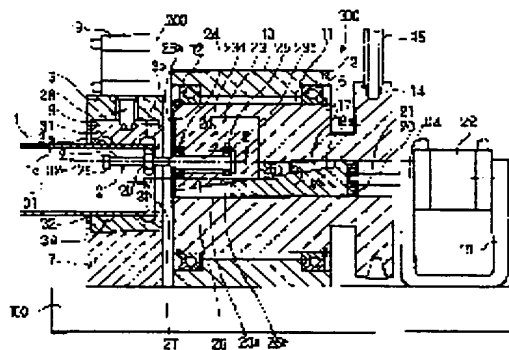
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## (54) MULTISTAGE CORD TAKING-OUT DEVICE FOR PIPE

### (57)Abstract:

PROBLEM TO BE SOLVED: To respectively make the outside diameters of plural cord parts coincide with required outside diameters with simple constitution.

SOLUTION: Plural grooves 3a, 3b having shapes corresponding to the outline shapes of cord parts to be formed on a pipe 1 are formed on the inner peripheral surface of a die. A punch 2 is arranged in the inside of the pipe 1 and has a rotary shaft 2c which is arranged in parallel to the center line 01 of the pipe 1 and plural projections 2a, 2b which are provided opposing to the respective grooves 3a, 3b. With a punch driving device 300, the punch 2 is revolved along the inner peripheral surface 1c of the pipe 1 as making the projections 2a, 2b of the punch 2 press-contact with the inner peripheral surface 1c of the pipe 1. The respective projections 2a, 2b has circular-arc parts by which press-contact with the inner peripheral part 1c of the pipe 1 is enabled on their outer peripheral surfaces and plural circular-arc parts are formed imparting phase difference to each other so as to be alternately in a press-contact state to the inner peripheral surface 1c of the pipe 1 between the plural projections 2a, 2b at the time of working.



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